



Rail Enhancement Fund  
Project Application Form  
FY 2010

Internal Use

2010005a

DRPT Tracking #

Date: January 30, 2009

A. Name of Applicant (Name and Address)

Norfolk Southern Railway Company  
Three Commercial Place  
Norfolk, VA 23510

Applicant type:

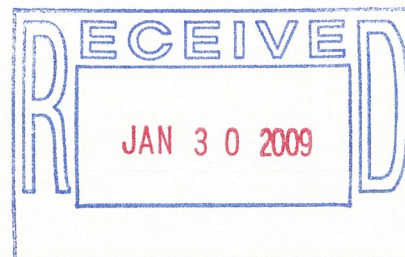
☐ Passenger Railroad

☒ Freight Railroad

☐ Locality

☐ Business

☐ Other \_\_\_\_\_



B. Contact Information:

Responsible Person/Title: Sarah Quisenberry, Director Strategic Planning

Telephone: 757-629-2686 Fax: 757-533-4884 Email: sarah.quisenberry@nscorp.com

Project Manager/Title: Sarah Quisenberry, Director Strategic Planning

Telephone: 757-629-2686 Fax: 757-533-4884 Email: sarah.quisenberry@nscorp.com

C. Project Title: Coal Corridor Initiatives - Andover

Modified  
by DRPT

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

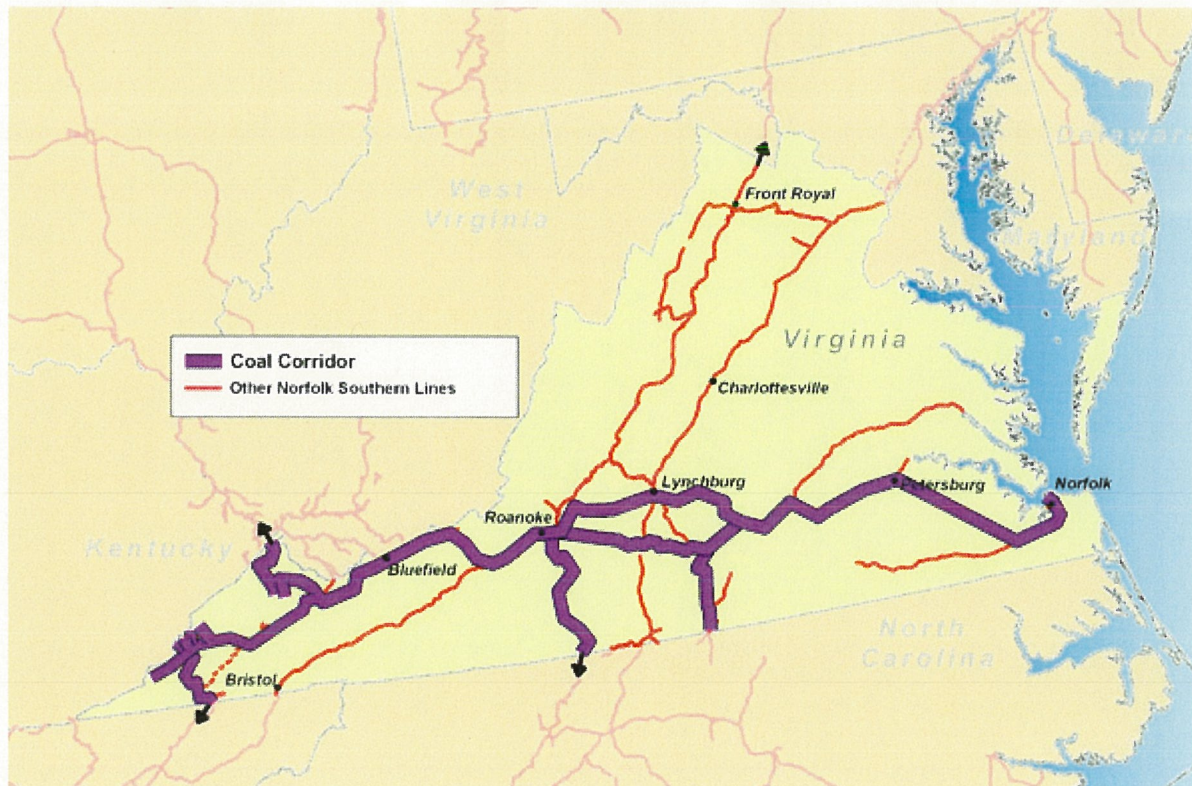
The Coal Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Roanoke and into the Virginia coalfields. NS lines to coal fired power plants in southern Virginia and on the Virginia/North Carolina border are included as well. (see map next page)

Projects:

A) Andover Rail Sidings - Andover, Wise County, mp 2.3-T to 1.2T & LN-279.1 to LN-280.1 (see Exhibit I)

~~B) Clarkton Passing Track Extension, Clarkton, Halifax County, mp L-37 (see Exhibit II).~~





E. Owner of Property/Right-of-Way/Facility/Personal Property:

Norfolk Southern Railway Company owns the mainline track rights-of-way, tunnels, bridges, and related appurtenances. NS or an affiliate will acquire any property required.

F. Responsible Party for Continuous Maintenance of Project:

Norfolk Southern Railway Company. This application is for capital costs only. NS will assume all ongoing maintenance and operating cost responsibilities and future capital costs.

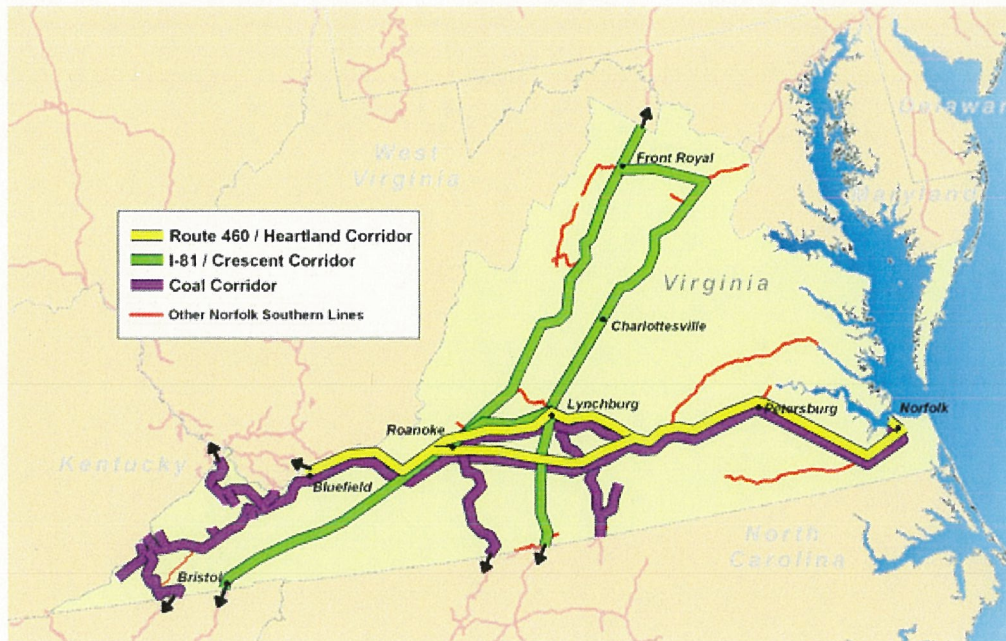
G. Project Information:

1) Description of Project:

The NS Coal Corridor is comprised of the NS mainlines from the Port of Hampton Roads across the southern half of the state through Petersburg and Roanoke and on to the Central Appalachian coal fields, as well as branch lines serving the coal fields and coal-fired power plants. The Coal Corridor and Route 460/Heartland Corridor (subject of another Rail Enhancement Fund application, overlap from the Port of Hampton



Roads west to Bluefield. The I81 Crescent Corridor also overlaps the Coal Corridor from Lynchburg and Altavista west to Radford.



Strong freight railroads with adequate capacity enable companies in the Commonwealth of Virginia to conduct business efficiently and effectively. A strong transportation network is vital to a state's economic health and future vitality. In recent years US annual coal production has been over one billion tons, while Virginia production has been approximately 30 million tons. The growth in US coal has been driven by the Powder River Basin coal in the west. Declining Virginia coal production has had a significant impact on southwest Virginia producing some of the state's highest unemployment rates since the 1990s. Despite these challenges to the industry, the Virginia coal industry contributes significantly to the state's economy.

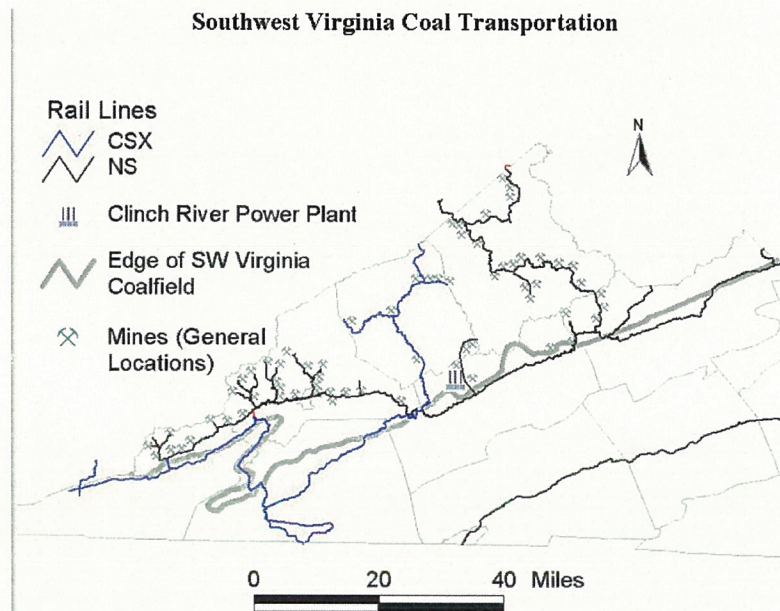
### Coal-Field Regions



Source:  
• VCCER

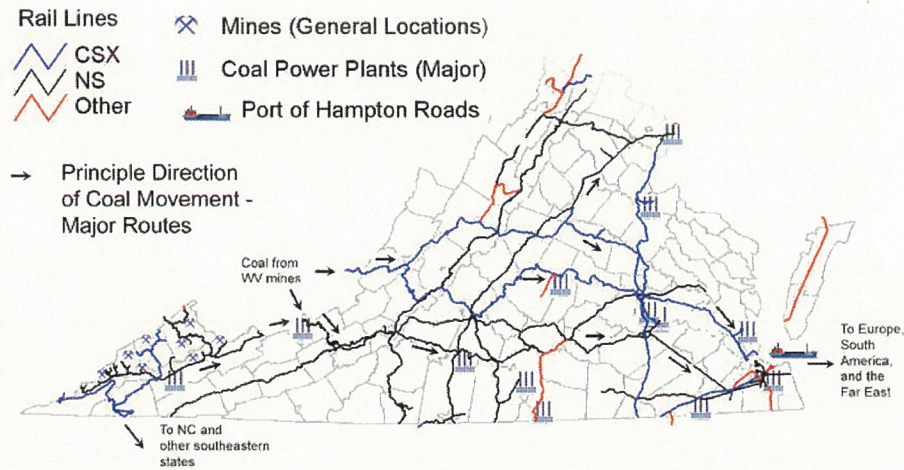


Recent changes in the global market, from the value of the US dollar to consumption by China of coal and steel, have resulted in enhanced opportunity for the US coal producers. Virginia coal is generally high in quality with a high energy content and low sulfur content, an ideal combination for electricity generation. Hampton Roads is the nation's largest coal port. NS coal shipments through Hampton Roads increased 41% in 2008 (vs 2007) from 13.44 to 18.95 million tons. The majority of Virginia coal is shipped from mine to market by railroad. It is estimated that over 90% of Virginia's coal production is hauled to market by Norfolk Southern. A significant portion of the utility coal produced in southeast Virginia is shipped to generating stations in Tennessee, the Carolinas and/or Georgia.





## Virginia Coal Transportation



### Sources:

- CSX Corporation
- Norfolk Southern Corporation
- Virginia Economic Development Partnership

Source: VCCER

Two projects are proposed for the Coal Corridor.

Coal Corridor Projects	Start Year	Benefits	Cost (millions)
Andover Rail Sidings	2010	Capacity, flexibility, grade crossings	\$2.9
<del>Clarkton Siding Extension</del>	<del>2011</del>	<del>Capacity, flexibility</del>	<del>\$5.3</del>

### A. Andover Rail Sidings

Andover, VA sits on the southern edge of the Virginia coalfields with a small yard serving the area's customers. Several years ago NS purchased the Powell River Railroad, the former-L&N main line between Big Stone Gap and Norton, VA. NS lines converge at Andover from three different directions, and trains have no place to meet. Due to the lack of space to meet, trains are held at the mines, at Norton, or on the small sidings between Andover and Gate City, causing vehicular delay as these sidings cross streets at grade.

This project involves the creation of a siding (or "pocket track") within the Andover yard limits by rearranging, rehabilitating and connecting several auxiliary tracks.

Begin westbound on Appalachia District at milepost 2.3-T:

(A) Replace #10 hand-throw turnout (from main track to Load Track #1) with hand-throw #15 turnout.



- (B) Upgrade Load Track #1 between milepost 2.3-T and 1.4-T
- (C) Construct track and tie-in between milepost 1.4-T and 1.2-T (1.2-T=LN-279.1)
- (D) Upgrade former L&N main line between milepost LN-279.1 (1.4-T=LN-279.1) and milepost LN-279.7 (0.6-T=LN-279.7)
- (E) Install two #15 hand-throw crossovers at milepost LN-279.7/0.6-T (Pine Street, which has crossing signals)

Begin eastbound on Clinch Valley Extension at milepost IN-5.5

- (F) Upgrade former L&N mainline between milepost LN-279.7 and milepost LN-280.1
- (G) Convert #10 hand-throw turnout at milepost LN-280.1/IN-5.5 to #15 hand-throw crossover
- (H) Install #15 hand-throw crossover at milepost LN-280.1/IN-5.5 (immediately west of G)

~~**B. Project Clarkton Siding**~~

~~The L-line begins in Lynchburg, crosses the Coal Corridor at L- 33.5 at Vabrook and continues south to connect with the Clover branch servicing the Clover power stations and into North Carolina to the Hyco and Mayo power plants. In addition to coal trains, there are several merchandise customers served on these lines. Clarkton siding is located at milepost L-37. Unit coal trains average 180 cars per train. The L-line is single track with a short siding at Clarkton (L-37), Sinai (L-58), and Denniston (L-68). NS proposes to extend the Clarkton siding to 11,000 feet in order to provide room for unit coal trains (both empty and loaded) and merchandise trains to meet and pass safely.~~

2) Project Objectives:

**A – Andover Rail Siding**

The objective of the project is to improve safety and improve operating efficiency. Improving the operating efficiency of the area will increase the freight capacity which will result in a reduction in the time that cars and trucks are waiting at grade crossings.

These lines serve Virginia coalmines and handle approximately 85% utility coal and 15% export coal. Virginia's coalmines, which are located entirely within the southwestern counties of the Commonwealth, are in direct competition with those in West Virginia, Kentucky and Tennessee. Many of the competing mines benefit from being located on mainline routes of Norfolk Southern Railway Company and/or CSX Transportation, Inc. As coal receivers, especially electric utilities, increase their ownership of coal hauling train-sets, round-trip cycle times, including line-of-road transit, are becoming a significant factor in the customers' coal sourcing decisions.

With the new siding, trains will be able to meet and pass as they move through Andover/Appalachia (without blocking road crossings while standing) rather than being held at the mines, on current sidings, or in Norton. Eliminating the need to



hold trains will improve coal train efficiency that will improve throughput at the coalmines and will allow Norfolk Southern to handle these shipments as expeditiously as those originating in neighboring states. Based on September 2008 data, NS operated an average 16.8 trains per day into and out of Andover Yard. This project will allow each train to avoid about an hour's delay.

**B – Clarkton Rail Siding**

~~The objective of this project is to provide room for unit coal trains (both empty and loaded) and merchandise trains to meet and pass safely and thereby increase capacity and improve service for customers.~~

3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

Several projects identified for the Route 460/Heartland Corridor also benefit the Coal Corridor as the coal and Heartland intermodal corridors overlap through much of Virginia.

No provision has been made for crossing closure or grade separation(s) associated with the Andover project. However, there is a possible opportunity for closing one or both of the crossings in the project area as alternate access is available. Both Kilbourne Avenue and Pine Street are connected and Inman Pike provides access to the area.

4) Describe the Public Benefits of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A).

**A. Andover Rail Sidings Benefits:**

This project will help to keep Virginia coalmines competitive with mines in West Virginia, Kentucky and Tennessee. The Andover project will enhance the safety of the area and reduce emissions.

By improving train movements through Andover/Appalachia, several benefits are achieved:

- Improved grade crossing safety/Reduced vehicular delay at grade crossings (especially in other Southwest Virginia cities and towns, estimated 2+ hours per day)
- Reduced emissions of idling vehicles and trucks at grade crossings.
- Improved operating efficiency and the potential for increased throughput at Virginia coalmines.
- Improved freight transit time with improved operating efficiency
- Reduced fuel consumption (16.8 trains per day)
- Reduced emissions as trains may meet and pass rather than be held or idle while waiting to progress (16.8 trains per day).
- The two coal load-outs in Virginia that presently have the capacity and coal specifications required for Dominion Power's planned generating station near Caledonia, Virginia, are both located in Wise County west of Andover/Appalachia.



### ~~B. Clarkton Siding~~

H. Type of Project:

A. Andover, ~~B. Clarkton,~~

- 1) A, B New Construction    A Rehabilitation    \_\_\_ Study
- 2) A, B Rail Infrastructure    \_\_\_ Rail Facility/Station  
\_\_\_ Equipment/Rolling Stock    \_\_\_ Signals/Communication Equipment
- 3) Other \_\_\_\_\_

### I. Application Scope of Work Covers:

☒ Entire Project    ☐ A Phase of a Multi-Phase Project    ☐ Completion Phase

### J. Project Budget Summary:

Coal Corridor Projects:	Andover Siding	Clarkton Siding
Preliminary Services, Engineering, or Feasibility Study	87,400	157,700
Environmental Evaluation	0	0
Design Engineering	0	35,000
Right of Way Acquisition	0	47,000
Construction	2,635,200	4,671,700
Construction Management	147,800	266,600
Lease/Acquisition of Equipment	0	0
Public Involvement (if applicable)	0	0
Other: (Contingency)	67,600	122,000
Subtotal	2,938,000	5,300,000
Total Project	<del>\$8,238,000</del>	



K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

L. Rail Enhancement Funds Requested in this Application: ~~\$5,766,600~~ <sup>\$ 2,056,600</sup>  
 Maximum 70% of Total Project Budget. 70%  
 Do not include any previous allocations or future phases.

M. Local Match Required by Applicant: ~~\$2,471,400~~ <sup>\$ 881,400</sup>  
 At least a minimum 30% of Total Project Budget. 30%

If Overmatch, Provide Percentage \_\_\_\_\_

1) Match breakdown by Source (Including any in-kind match)

- a. Provider of Local Match Norfolk Southern
- b. Status (confirmed/anticipated) confirmed
- c. Attach justification for value of in-kind match.  
 NS will provide prior to completion of Rail Enhancement Grant Agreement

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Overmatch \_\_\_\_\_
- b. Status (confirmed/anticipated) \_\_\_\_\_

Funding Allocation by Project	Andover Sidings	Clarkton Siding
Rail Enhancement Funding	\$2,056,600	\$3,710,000
Rail Enhancement Funding %	70%	70%
NS match	\$881,400	\$1,590,000
NS Match %	30%	30%
NS Overmatch %	0%	0%
Total	2,938,000	\$5,300,000

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

**A. Andover Rail Sidings:**

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
o Notice to Proceed	Start Point
o Survey and Finalize Plans	3 Months
o Track work	7 Months
o Upgrade Existing Bridge	8 Months



**B. Clarkton Siding:**

<u>Milestone Description</u>	<u>Estimated Completion Date From Notice to Proceed</u>
○ Notice to Proceed	Start Point
○ Survey and Develop Plans	3 Months
○ Acquire Right of Way (if required)	6 Months
○ Bidding	8 Months
○ Permitting	10 Months
○ Grading	15 Months
○ Track work	18 Months

O. Statement of how this project promotes or does not preclude dual/multi-access use.

**A. Andover Siding**

This project is on Norfolk Southern owned right-of-way; the rail line will remain an exclusive Norfolk Southern route.

**B. Clarkton Siding**

~~This project is on Norfolk Southern owned right-of-way; the rail line will remain an exclusive Norfolk Southern route.~~

P. List additional users of rail line, facility, and/or equipment:

**A. Andover Rail Siding**

None.

**B. Clarkton Siding**

~~None.~~

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

**A. Andover Rail Sidings**

No environmental issues are expected, as all of the construction will occur within NS owned right-of-way. Environmental benefits of the project will include improved air quality through reduced emissions as trains will not need to be held or idle at the coal mines, at Norton, or on the siding between Andover and Gate City, and as vehicular traffic will not be idled as long or as often when grade crossings are blocked.

**B. Clarkton Siding**

~~No environmental issues are expected for the Clarkton Siding as all work is expected to be performed on the NS right-of-way. It is expected to have a positive environmental impact by reducing the time that trains idle, and thereby reducing emissions, while waiting to accomplish a meet and pass when the sidings are farther spread out.~~

Required Attachments:



*Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.*

1. Attachment A – Project Data Information Form (provided)
2. Attachment B – Application Checklist (Provided)
3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D).
4. Certification of Match/% of Match/Documentation of Source of Match including Defined Match Source (To be provided by Applicant).
5. Certification of Additive Investment (To be provided by Applicant).
6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.
7. Statement by the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner).

#### Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

Norfolk Southern Railway Company

  
Name: John H. Friedmann  
Title: Vice President

Date: 1/30/09

One signed original, twelve copies, and an electronic copy in pdf format of the completed application and required documentation must be mailed under applicant cover to:

Director  
Virginia Department of Rail and Public Transportation  
1313 East Main Street, Suite 300  
Richmond, Virginia 23219



Rail Enhancement Fund  
Project Application Form

**EXHIBIT I**

Attachment E  
Certification Of Match

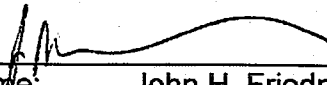
Norfolk Southern - Andover Rail Siding - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

Norfolk Southern Railway Company ("Norfolk Southern") has applied to the Commonwealth of Virginia for Rail Enhancement Funds in the amount of \$2,056,600 in connection with the Norfolk Southern Andover Rail Siding Project. As described in greater detail in Norfolk Southern's application, this project will encompass upgrading and interconnecting 2.1 miles of existing trackage to provide sufficient space to meet trains.

As part of this application, Norfolk Southern hereby certifies that it will provide a local match equivalent to 30 percent of the estimated total project cost for which Rail Enhancement Funds are made available, or \$881,400. This match will be provided entirely by Norfolk Southern or one or more parents, subsidiaries or affiliates of Norfolk Southern.

NORFOLK SOUTHERN RAILWAY COMPANY

By:

  
\_\_\_\_\_  
Name: John H. Friedmann  
Title: Vice President



Rail Enhancement Fund  
Project Application Form

**EXHIBIT I**

Attachment F  
Certification Of Additive Investment

Norfolk Southern - Andover Rail Siding - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

This letter certifies that the Virginia Rail Enhancement Funds requested in the accompanying application will add to the state's rail infrastructure and will not be used to replace funds that would have otherwise been spent in the Commonwealth.

Norfolk Southern's application requests funds for creating a passing siding at Andover, VA by upgrading and interconnecting existing trackage to provide space for trains to meet.

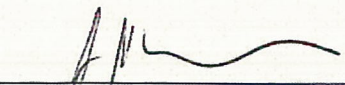
The overall objective of the project is to improve safety, increase capacity and speed up train operations in the coalfields of Southwestern Virginia. Three routes from coal mining areas converge at Andover and at present, no track exists where trains can pass each other. Instead, they must be held in locations removed from Andover, resulting in delay to coal shipments and in inefficient utilization of equipment. This trackage handles the preponderance of coal mined in Southwestern Virginia, so improvements to the local rail infrastructure will improve competitiveness of Virginia coal vis-à-vis coal mined in neighboring states.

Although Norfolk Southern foresees some traffic growth in this corridor, and although the corridor presently experiences daily congestion, internal funds will not be available to undertake the improvements at Andover for some years to come. Without Rail Enhancement Funds, this project will not be built unless there are significant changes in the traffic flows.

In sum, Norfolk Southern certifies that the Virginia Rail Enhancement Funds requested in its application will be used as part of a public-private partnership for improvements that NS would not undertake alone.

NORFOLK SOUTHERN RAILWAY COMPANY

By:

  
\_\_\_\_\_  
Name: John H. Friedmann  
Title: Vice President  
Date: 2-17-2009



Rail Enhancement Fund  
Project Application Form

**EXHIBIT I**

Attachment G  
Statement Of SWAM Participation

Norfolk Southern - Andover Rail Siding - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

January 30, 2009

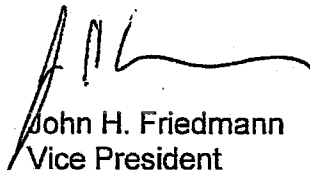
To Whom It May Concern:

In connection with Norfolk Southern Railway Company's Rail Enhancement Fund Application for Andover Rail Sidings project, please accept this letter as the applicant's statement regarding small, women- and minority-owned business (SWAM) participation goals.

For project work that is not performed by Norfolk Southern's workforce, Norfolk Southern will undertake reasonable and good faith efforts to achieve the SWAM participation goal for the project through race-neutral and gender-neutral means that are lawful and non-discriminatory. We understand the project participation goal to be forty percent (40%) of the total value of contracts between Norfolk Southern and third parties for the performance of the project work. The success of Norfolk Southern's efforts will of course be impacted by the availability of qualified and willing small businesses and women- and minority-owned businesses within the market area of the project.

Thank you for considering Norfolk Southern's application.

Very truly yours,



John H. Friedmann  
Vice President



Rail Enhancement Fund  
Project Application Form

**EXHIBIT I**

Attachment D  
Statement of Public Interest

Name of Applicant and Project:

Norfolk Southern - Andover Rail Siding - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1


Statement from the owner of the facility that acknowledges the Commonwealth will have a Public Interest in Private Facilities impacted by this project

To Whom It May Concern:

At the appropriate time, NS will enter into an appropriate agreement to be negotiated with the Commonwealth of Virginia to protect the Commonwealth's public interest in the Andover Rail Siding Project.

NORFOLK SOUTHERN RAILWAY COMPANY

By:

  
\_\_\_\_\_  
Name: John H. Friedmann  
Title: Vice President





Rail Enhancement Fund  
Project Application Form

Internal Use

DRPT Tracking #

**EXHIBIT I**

Attachment A  
Project Data Information Form

Date: January 30, 2009

Name of Applicant and Project:

**Norfolk Southern – Andover Rail Sidings**

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

**Project Cost and Construction period:** Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

**Demand Characteristics:** This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

**Steady State Demand:** This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

**Project Impact on Travel Distance:** This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

**Demand Characteristics for a 15-year Performance Period:** This term refers to the project output by performance year, which will be utilized to determine that public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.



## Attachment A

Form A1 – Project Cost and Construction Period

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

First Construction Year: 2010

Last Construction Year: 2010

<b>Year</b>	<b>Total Project COST</b>	<b>Total DRPT COST</b>
2009	\$2,938,000	\$2,056,600
<b>Total</b>	<b>\$2,938,000</b>	<b>\$2,056,600</b>

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.



**EXHIBIT I**  
Attachment A  
Form A2 – Freight Service  
Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

---

Demand Characteristics	CATEGORY	UNITS	VALUE
	Steady state demand – diversion of freight to rail (from trucks)	Carloads/Year	
	First year of diversion	Carloads/Year	n/a
	Number of years until steady state	Number of Years	n/a

Project impact on Travel Distance	CATEGORY	UNITS	VALUE
	Rail miles in Virginia (Existing routing before project)	Miles	n/a
	Rail miles in Virginia (routing after project completion)	Miles	n/a
	Number of years until steady state	Number of Years	n/a

Conversions	CATEGORY	UNITS	VALUE
	Railcars per Train	Railcars/Trains	30-100 cars/train
	Rail tons per Railcar	Tons/Railcar	100 tons/railcar
	Trucks per Railcar	Trucks/Railcar	3 trucks/railcar

Other	CATEGORY	UNITS	VALUE
	Change in Daily Delay for Freight Trains	Railcars/Trains	1 train hour on 16.8 trains per day on average 65 cars/train
	Reduction in Number of Rail At-Grade Crossings	Tons/Railcar	104

Based on September 2008 data, NS operated an average of 16.8 trains per day into and out of Andover Yard. This project will allow each train to avoid about an hour's delay.

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

**EXHIBIT I**  
**Attachment A**

Form A5– Demand Characteristics for 15-Year Performance Period

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

Performance Year	Performance Value *
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
Total	

For Freight Service Projects – car loads or containers per year  
For Inter-City/Amtrak Passenger Projects – passengers per year  
For Commuter/VRE Passenger Projects – passengers per year

- Reduced wait at grade crossings in Andover with average 16.8 trains per day
- NS employs approximately 100 at Andover and 54 at Norton
- Reduces 16.8 train hours aggregate train delay which will allow faster turn times for assets such as locomotives, crews and freight cars.
- Based on September 2008 data, NS operated an average of 16.8 trains per day into and out of Andover Yard. This project will allow each train to avoid about an hour's delay.

*DRPT ≈ 4,200 hrs / year*  
*estimated delay savings*





Rail Enhancement Fund  
Project Application Checklist

Internal Use

DRPT Tracking #

**EXHIBIT I**

Attachment B

Date: January 30, 2009

Name of Applicant and Project:

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

Checklist for Application:

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ YES ☐ NO

2. Project is an Additive Investment to Virginia.

☒ YES ☐ NO

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ YES ☐ NO

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ YES ☐ NO

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☒ YES ☐ NO

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ YES ☐ NO



Rail Enhancement Fund  
Project Application Form

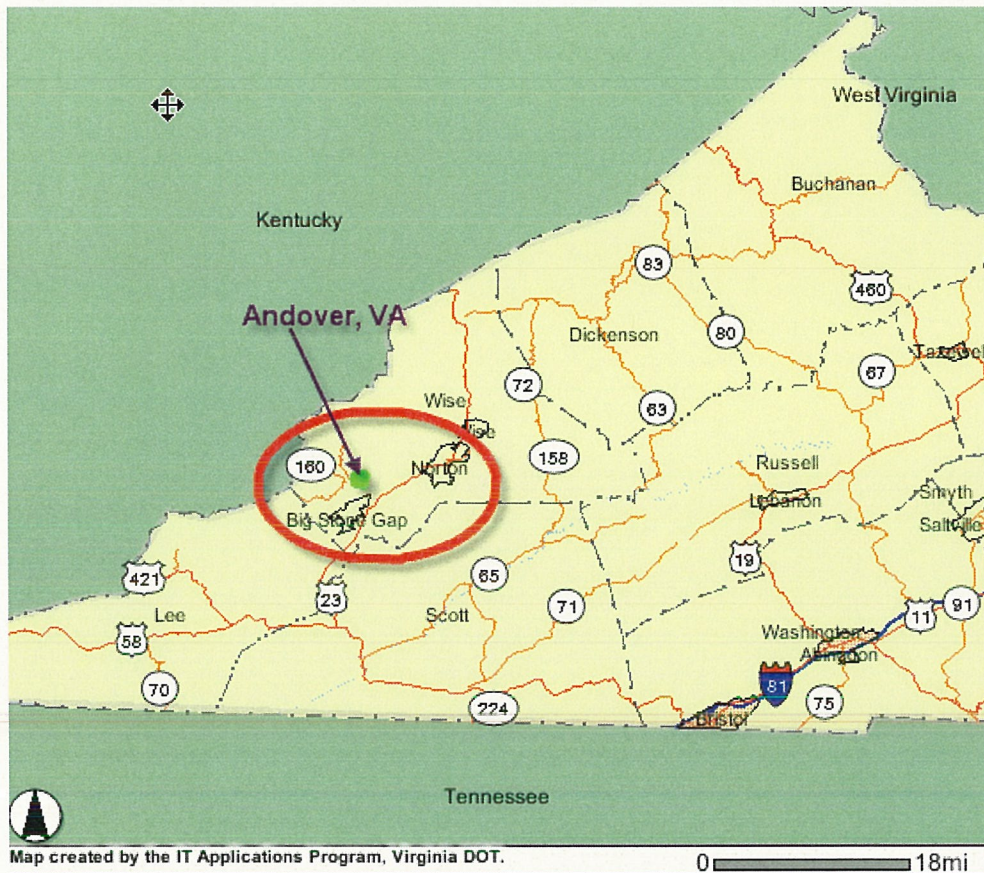
**EXHIBIT I**

Attachment C  
Project Background Information

Date: January 30, 2009

Name of Applicant and Project:

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1





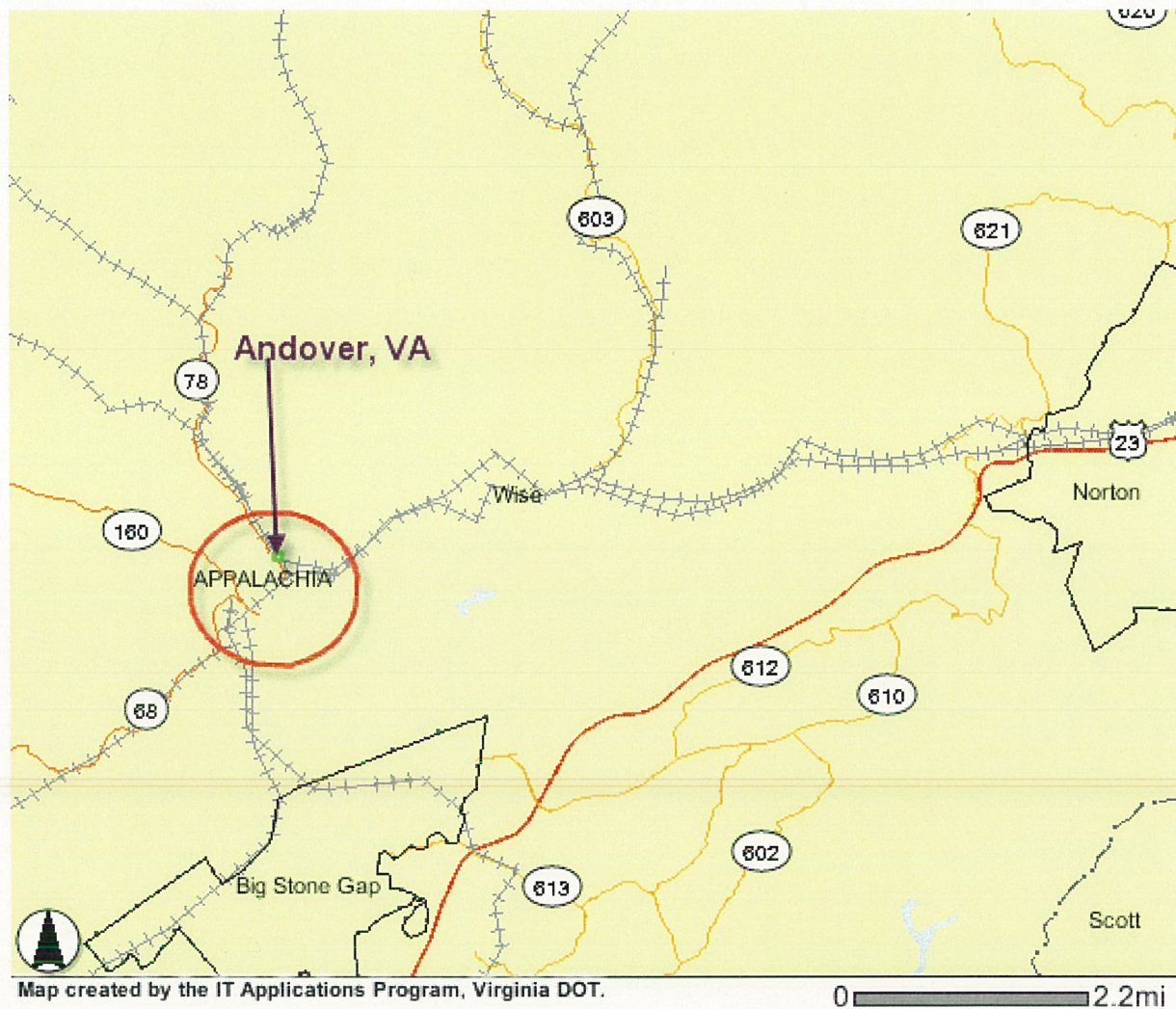
## EXHIBIT I

### Attachment C Project Background Information

Date: January 30, 2009

Name of Applicant and Project:

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1





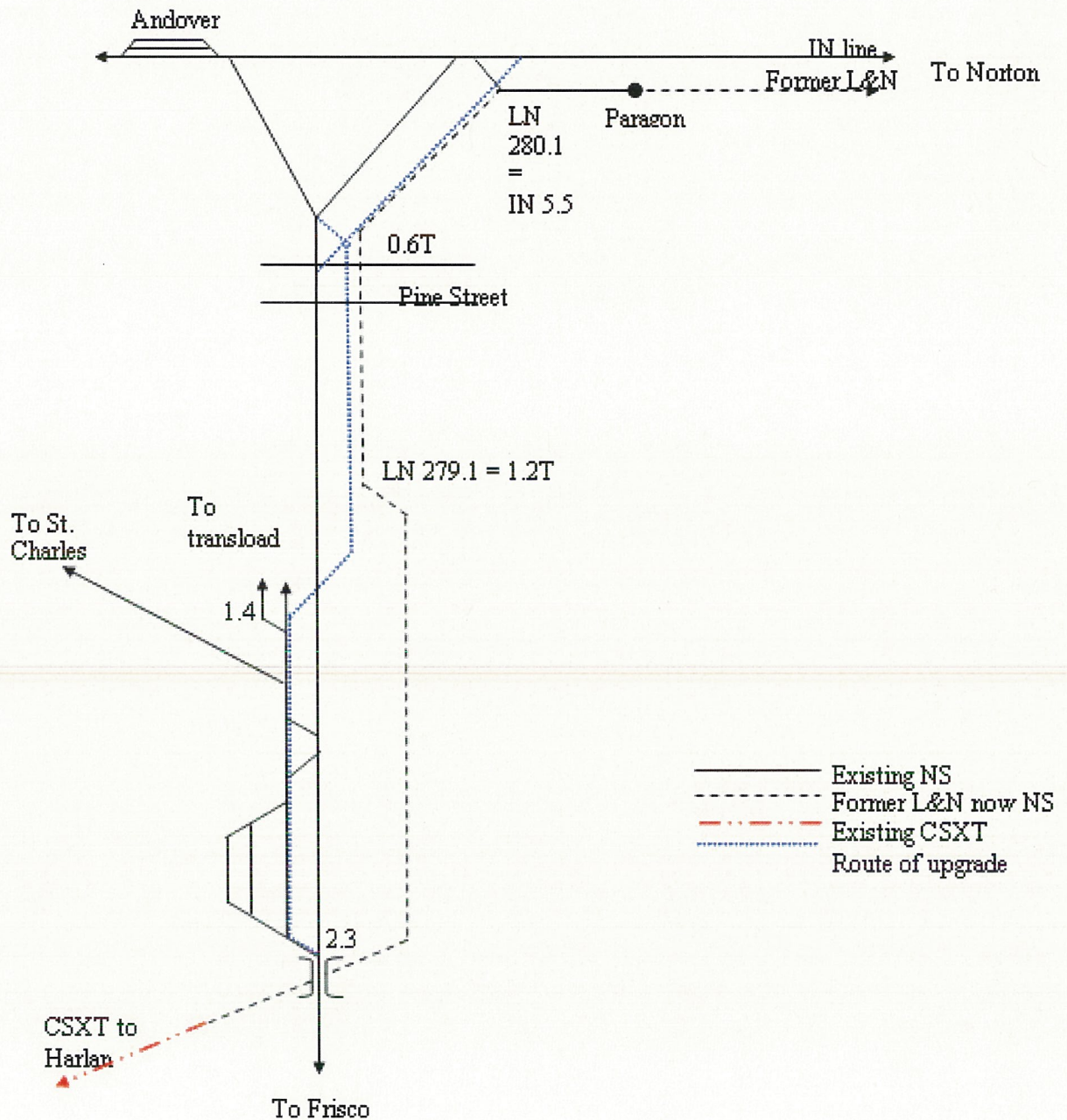
**EXHIBIT I**  
**Attachment C**  
**Project Background Information**

Date: January 30, 2009

Name of Applicant and Project:

Norfolk Southern - Andover Rail Sidings - mp 2.3-T to 1.2T & LN-279.1 to LN-280.1

Schematic Showing Proposed Changes at Andover VA





56

ADDITION FOR Andover Grade Crossing  
= 2,900 on Rte 78

**2007**

**Virginia Department of Transportation**

**Daily Traffic Volume Estimates**

**Including Vehicle Classification Estimates**

where available

**Special Locality Report**

**164**

Town of Appalachia

Traffic Data for use in grade crossing delay  
savings at Andover } Data  
provided  
by  
DPT

Information in this report is included in Report

**97**

(Wise County)

Prepared By

**Virginia Department of Transportation**

**Traffic Engineering Division**

In Cooperation With

**U.S. Department of Transportation**

**Federal Highway Administration**

## Glossary of Terms:

**Route:** The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

**Length:** Length of the traffic segment in miles.

**AADT:** Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

### QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

**4Tire:** Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

**Bus:** Percentage of the traffic volume made up of busses.

**2Axle Truck:** Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

**3+Axle Truck:** Percentage of the traffic volume made up of single unit trucks with three or more axles.

**1Trail Truck:** Percentage of the traffic volume made up of units with a single trailer.

**2Trail Truck:** Percentage of the traffic volume made up of units with more than one trailer.

### QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link



**K Factor:** The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

**QK:** Quality of the K Factor estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- F Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Design Hour Factor (K Factor) of Similar Neighboring Traffic Link
- O Provided by External Source

**Dir Factor:** The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

**AAWDT:** Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.







**QW:** Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source








**Year:** Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

## Route Shield Legend

### Route Systems

 	Interstate Route	Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.
	US Route	
	Virginia State Route	
	Frontage Road (F precedes frontage route number)	
	Secondary Route	

### Special Routes

	Bus - Business Route	
	Bypass - Bypass Route	
	Truck - Truck Route	
	ALT - Alternate Route	
	Wve - Wve Route connector	
	P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.	
	The VDOT Maintenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.	



# Annual Average Daily Traffic Volume Estimates By Section of Route Town of Appalachia

5/14/2008

Virginia Department of Transportation  
Traffic Engineering Division  
2007  
Annual Average Daily Traffic Volume Estimates By Section of Route  
Town of Appalachia

Route	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail								
Town of Appalachia																	
601 97	1.01	280	R	From: Dead End								NA		NA		07/16/2003	
				To: SR 78													
669 97	0.02	60	R	From: 97-601								NA		NA		07/16/2003	
				To: SR 78													
1301 97	0.05	100	R	From: 97-601								NA		NA		03/29/2007	
				To: 97-1302													
1302 97	0.15	90	R	From: 97-1303 Chestnut St								NA		NA		03/29/2007	
				To: 97-1301													
1303 97	Chestnut St	0.06	180	R	From: 97-601								NA		NA		03/29/2007
					To: 97-1302												
1304 97	Bell Ave	0.08	420	R	From: US 23								NA		NA		03/28/2007
					To: 97-1305 Henry St												
1304 97	Bell Ave	0.07	260	R	From: 97-1305 Henry St								NA		NA		03/28/2007
					To: 97-1333 Richmond St												
1305 97	Henry St	0.40	370	R	From: Dead End								NA		NA		03/28/2007
					To: 97-1304 Bell Ave												
1306 97	Oak St	0.15	130	R	From: US 23								NA		NA		03/28/2007
					To: Dead End												
1307 97	Railroad Ave	0.36	460	R	From: Bus US 23								NA		NA		03/28/2007
					To: Dead End												
1308 97	Depot St	0.07	1700	R	From: SR 78								NA		NA		03/28/2007
					To: Dead End												
1309 97	Kilbourne Ave	0.13	650	R	From: 97-1310 Brown St								NA		NA		03/28/2007
					To: 97-1312 River St												
1309 97	Kilbourne Ave	0.07	1100	R	From: 97-1312 River St								NA		NA		03/28/2007
					To: 97-1308 Depot St												
1310 97	Brown St	0.31	740	R	From: 97-1319 Powell St; Spruce St								NA		NA		03/28/2007
					To: 97-1315 Blondell Ave												
1310 97	Brown St	0.05	270	R	From: 97-1315 Blondell Ave								NA		NA		03/28/2007
					To: 97-1313 Dixon St												
1311 97	Cornett St	0.05	160	R	From: 97-1309 Kilbourne Ave								NA		NA		03/28/2007
					To: 97-1315 Blondell Ave												
1311 97	Cornett St	0.05	70	R	From: 97-1315 Blondell Ave								NA		NA		03/28/2007
					To: 97-1313 Dixon St												
1312 97	River St	0.05	510	R	From: 97-1309 Kilbourne Ave								NA		NA		03/28/2007
					To: 97-1315 Blondell Ave												
1313 97	Dixon St	0.17	90	R	From: 97-1317 Wilson St								NA		NA		03/28/2007
					To: 97-1311 Cornett St												
1314 97	Templeton St	0.22	80	R	From: Dead End								NA		NA		03/28/2007
					To: 97-1313 Dixon St												



Virginia Department of Transportation  
Traffic Engineering Division  
2007  
Annual Average Daily Traffic Volume Estimates By Section of Route  
Town of Appalachia

Route	Length	AADT	QA	4Tire	Bus	Truck				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
						2Axle	3+Axle	1Trail	2Trail							
Town of Appalachia																
1315 97 Blondell Ave	0.26	390	R			From: 97-1316 Harding St				NA			NA		03/28/2007	
						To: 97-1312 River St										
1316 97 Harding St	0.11	210	R			From: Dead End				NA			NA		03/28/2007	
						To: 97-1315 Blondell Ave										
1317 97 Wilson St	0.10	40	R			From: 97-1315 Blondell Ave				NA			NA		03/28/2007	
						To: 97-1313 Dixon St										
1319 97 Spruce St	0.05	120	R			From: Dead End				NA			NA		03/29/2007	
						To: 97-1321 Inman St										
1319 97 Spruce St	0.25	1100	R			From: 97-1310 Brown St				NA			NA		03/28/2007	
						To: 97-1310 Brown St										
1319 97 Powell St	0.16	430	R			From: 97-1328 Pine St				NA			NA		03/28/2007	
						To: 97-1328 Pine St										
1319 97 Railroad Dr	0.04	420	R			From: SR 78				NA			NA		03/28/2007	
						To: Dead End										
1320 97 Spruce St	0.02	210	R			From: US 23				NA			NA		03/29/2007	
						To: Bus US 23										
1321 97 Inman St	0.15	1800	R			From: 97-1319 Spruce St				NA			NA		03/29/2007	
						To: 97-1319 Spruce St										
1322 97 Roberts St	0.29	540	R			From: 97-1319 Spruce St				NA			NA		03/29/2007	
						To: Dead End										
1323 97 Carroll St	0.05	150	R			From: 97-1319 Spruce St				NA			NA		03/29/2007	
						To: 97-1326 Fifth St										
1324 97 Edmond St	0.10	190	R			From: 97-1325 Wise St				NA			NA		03/29/2007	
						To: 97-1326 Fifth St										
1325 97 Wise St	0.09	170	R			From: Dead End				NA			NA		03/29/2007	
						To: 97-1324 Edmond St										
1326 97 Fifth St	0.54	49	R			From: 0.08 MW 97-1327				NA			NA		03/29/2007	
						To: Dead End										
1327 97 Sixth St	0.04	48	R			From: 97-1326 Fifth St				NA			NA		03/29/2007	
						To: Dead End										
1328 97 Pine St	0.02	300	R			From: 97-1319 Railroad Dr, Powell St				NA			NA		03/28/2007	
						To: US 23										
1329 97 Kentucky Ave	0.10	710	R			From: US 23				NA			NA		03/29/2007	
						To: 97-1330 Mouser St										
1330 97 Mouser St	0.04	670	R			From: 97-601				NA			NA		03/29/2007	
						To: 97-1329 Kentucky Ave										
1330 97	0.29	140	R			From: US 23				NA			NA		03/29/2007	
						To: US 23										
1332 97 Lee St	0.15	610	R			From: Bus US 23				NA			NA		03/28/2007	
						To: 97-1333 Richmond St										

Virginia Department of Transportation  
Traffic Engineering Division  
2007  
Annual Average Daily Traffic Volume Estimates By Section of Route  
Town of Appalachia

Route	Length	AADT	QA	4Tire	Bus	Truck-----				QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
						2Axle	3+Axle	1Trail	2Trail							
Town of Appalachia																
1333 97 Richmond St	0.06	70	R			From: 97-1304 Bell Ave					NA			NA		03/28/2007
						To: 97-1332 Lee St										
1334 97 Richmond St	0.09	60	R			From: Dead End					NA			NA		03/28/2007
						To: 97-1304 Bell Ave										
9677 97 W River Rd	0.05	110	R			From: Appalachia Elementary Sch					NA			NA		04/12/2007
						To: 97-1321 Inman St										
9779 97 	0.29	470	R			From: Appalachia High School					NA			NA		03/28/2007
						To: US 23										